A NEW METHOD OF CLOSING THE CANAL IN RADICAL OPERATION FOR INGUINAL HERNIA.

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AN undisturbed aseptic course given, as a matter of course, the two most important conditions for securing a permanent result after radical operation for hernia are—first, the complete elimination of the peritoneal infundibulum (funnel), of which no trace must be left in the canal, and, second, the firmest union of the rent in the fibrous layers of the abdominal wall that can be obtained.

A proper operation requires the hernial canal to be laid open throughout its whole length up to the level of the internal ring, and the neck of the sac and the peritoneum beyond the internal ring to be completely loosened and dissected free for a certain distance beyond. Thereafter the walls of the canal must be accurately sutured and brought in the closest possible apposition.

If these conditions are all complied with, and the person otherwise is healthy, we will secure a successful and lasting result. Here we have only to deal with the closing up of the canal.

Macewen, who does not—or at least originally did not—split open the canal, uses for this purpose a quilt suture, which takes hold parallel to the direction of the canal, and which in the half of its course is buried in the tissues. In order to facilitate parallelization, we will consider it as if he did really cut the canal, and thus got two flaps, which he apposes in everting them. Lucas-Championnière uses a similar quilt suture, also taking hold parallel to the direction of the canal, but with this difference,

that he carries it clear through the fibrous tissues on both sides, that he reinforces it with two ordinary suturæ nodosæ, and that he superposes the flaps, the internal in front of the external. The cuts below (Figs. 1 to 9) will show their methods of suturing and the kind of apposition which they respectively obtain.

Then we have Bassini, who removes the spermatic cord from

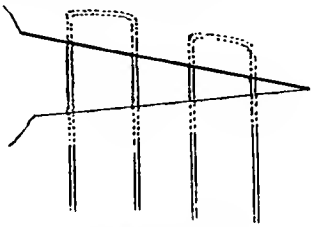

FIG. 1.—Macewen's suture placed.

its natural layer, arranges for it a new outlet between the muscular and aponeurotic sheets of the abdominal wall, and thereafter completely closes the whole original canal. As I consider his proceeding unnecessary and too much *contra naturam* to be good surgery, I shall not further take his method into consideration.

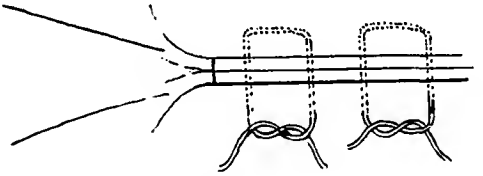

FIG. 2.—Macewen's suture tied.

In January, 1892, I had the privilege of being present at the Roosevelt Hospital in New York at an operation for radical cure of a large inguinal hernia on the left side, performed by Dr. McBurney. The contents of the sac were found to be part of the sigmoid flexure, and when the doctor, on account of this unfavorable circumstance, expressed his doubt about being able to secure a permanent result, I suggested to him a method of

suturing the fibrous layers, which I thought would give the greatest possible strength to the closure of the abdominal rent. The distinguished surgeon kindly approved of the suggestion, and made use of the suture.

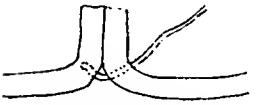

FIG. 3.—Apposition obtained by Macewen's suture.

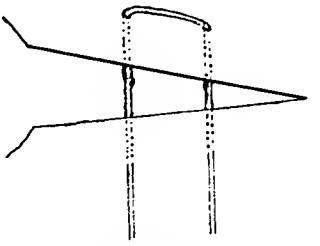

FIG. 4.—Lucas-Championnière's suture placed.

Since then I have employed this suture in a number of operations for the radical cure of hernia, and as it seems to me rational, both from an anatomical and from a technical point of

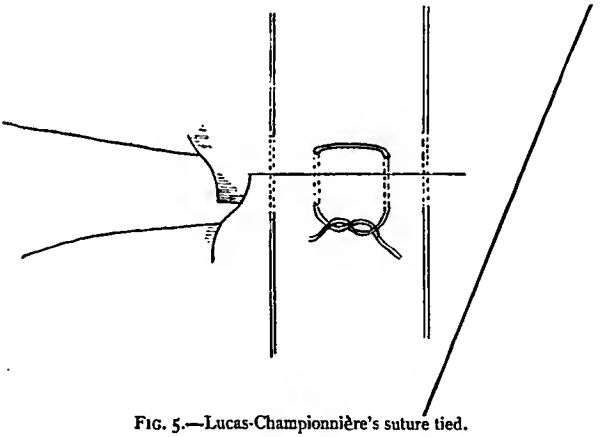

FIG. 5.—Lucas-Championnière's suture tied.

view, and superior in some respects to the methods of Macewen and Lucas-Championnière,—with which it most naturally can be compared,—I feel now justified in publishing it. It is, though,

very simple, and really nothing but an adaptation of Lembert's intestinal suture for this particular purpose.

It must be borne in mind that the predominant direction of

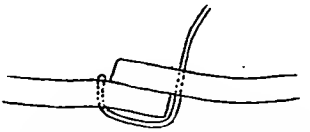

FIG. 6.—The apposition obtained by Lucas-Championnière's suture.

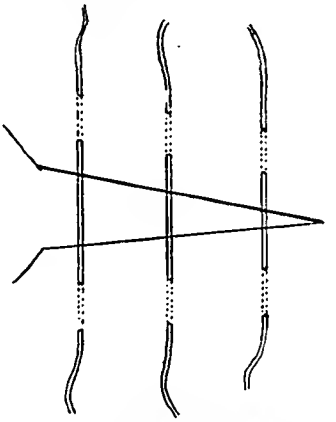

FIG. 7.—Author's suture placed.

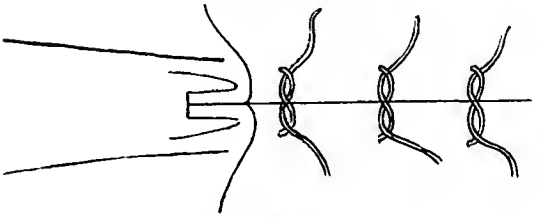

FIG. 8.—Author's suture tied.

the strongest fibres on both sides of the inguinal canal is parallel to the direction of this canal. Consequently, a suture, in order to take the strongest possible hold on these fibres, should be

inserted vertically to their direction and *not parallel*, as is the case with both Macewen's and Lucas-Championnière's sutures. Furthermore, I do not evert or superpose my flaps, but I invert them. Thereby I bring broad fibrous surfaces in contact with each other. The cuts annexed (Figs. 7 to 9) will sufficiently explain the way I introduce my sutures and the apposition I obtain.

Firmly believing, as I do, that good and successful surgery depends upon a close attention to details, I feel justified in sending these lines to the ANNALS.

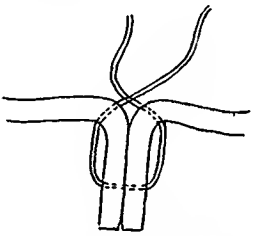

FIG. 9.—Apposition obtained by author's suture.

I use in preference Macewen's double-curved, dull-pointed needles with handles, but ordinary needles may be used just as well. I prefer medium-sized silk to catgut. Aseptic, it cannot cause any harm, and if not absorbed in course of time, it will remain indefinitely without ever giving rise to trouble.

My cases are, of course, too recent and too few to furnish statistical material of any value.